

Wax to the max

How hard do you have to work to make your car gleam? We tested more than two dozen liquids, sprays, and pastes to find out.

Let's start with some basic definitions: *Auto polish*--A liquid or paste that removes oxidation and embedded grime, and adds luster to the finish. *Auto wax*--A liquid or paste that removes oxidation and embedded grime, and adds luster to the finish. In other words, rather than settle on one term or the other, most manufacturers of car-care products use "polish" and "wax" interchangeably.

Manufacturers have also not settled on what ingredients work best. They use anything from traditional carnauba wax (which comes from a Brazilian palm tree) to "space age" polymers. We evaluated 26 popular liquids, pastes, and sprays for gloss, durability, cleaning ability, tendency to scratch or haze, and ease of use. In addition, we tested two "systems" requiring three separate applications (see [Polishes for the persnickety](#)). We also tested two "wash and wax" products that promise to deposit a coat of wax while you wash the car ([Polishes for couch potatoes](#), below).



EYE OF THE BEHOLDER

We based most of our evaluations on side-by-side observations. After all, making a car look good is what these products are all about. But we also used lab instruments to gauge how well the wax held up.

For the bulk of our testing, we used more than 300 3x12-inch metal panels coated with black, white, or red auto-body paint. Some panels had a glossy clear-coat layer over the paint, mimicking the finish on late-model cars; the rest had a plain color-coat finish.

The shining. Polishes typically promise to "restore dull, faded finishes," make "old cars look new," or some variation on that theme. To simulate a neglected finish, we used black test panels that had spent 18 months weathering on the roof of our Yonkers, N.Y., testing center. Nearly all the polishes produced a good or very good shine, but none made the weathered panels look like new. The products performed essentially the same on clear-coat and color-coat panels; we didn't see significant differences in gloss improvement.

Some polishes specifically promise to protect a car's finish from the ravages of nature. We didn't test for that, but it stands to reason that a layer of wax would provide some protection from tree sap, road tar, bird droppings, splattered insects, and sunlight.

Waxing and waning. Water forms high, dome-shaped beads on a waxed surface, and that phenomenon was the basis for our durability tests.

After waxing, we allowed the panels to weather outdoors, bringing them in for evaluation every 10 to 14 days. Each time, we washed each panel and then carefully applied two drops of distilled water. As the wax wore away, the water drops flattened. Instruments let us magnify the drops and plot their shape precisely, thereby assessing the condition of the remaining wax.

Some of the polishes claim to last up to a year. As corroboration, some allude to "independent laboratory tests" consisting of 52 consecutive trips through an automatic car wash--apparently simulating a year's worth of weekly car washes. But on the basis of our lab tests, we think that even the most durable products we tested would last only about two months in normal use. The durability you experience will depend on several factors, including the climate and whether you garage your car.

Two liquids, *Nu Finish* and *Turtle Wax Finish 2001*, recommend applying a second coat after 30 days for maximum protection. Their scores in the [Ratings](#) reflect performance after only one application, as with the other polishes. Tests of those two liquids with a second coat show that it did make a slight improvement, but not enough to warrant the added labor.

Coming clean. Ordinary washing removes only loose surface dirt, so cleaning ability is especially important if your car's finish is weathered.

We used weathered white panels for our cleaning tests. Only one product, *3M One Step Cleaner Wax 39006*, was excellent, making the panel look almost as clean as a new, unweathered one. The worst products simply covered the dirt with a coating of wax.

Scratching the surface None of these products can make a new car's glossy finish even glossier. Some can actually make the finish look worse, leaving behind fine scratches or a residue that's hard to remove. We used black clear-coat panels, which accentuate imperfections, for these tests.

We concluded that owners of cars with a light-colored finish needn't fret too much because such imperfections would be hard to see. But owners of dark-colored cars, especially shiny new black

cars, should choose a polish with a high score for resistance to scratching or hazing. Even then, they should first test the polish in an inconspicuous spot such as the door jamb.

The stains that some polishes leave on a car's plastic trim are a related problem. Products that warn users not to get polish on the trim tended to be the worst offenders, while those that promise not to stain were true to their word. The [Ratings](#) provide the details. **Toil and trouble.** Ease of use was the one test in which we used actual cars instead of test panels.

Not surprisingly, the sprays were easiest and fastest to use. Squirting on some polish and wiping it off is a lot easier than putting liquid or paste on an applicator, rubbing it into the car's surface, waiting for it to dry, and buffing away the residue. Waxing a medium-sized sedan with a spray polish took one person only about 25 minutes on average. But none of the sprays scored higher than fair in durability.

Liquid and paste polishes require more effort, and most take about twice as long to apply. One exception was *Prestone Bullet Wax*, whose convenient applicator helped us finish the job a little more quickly.

Recommendations

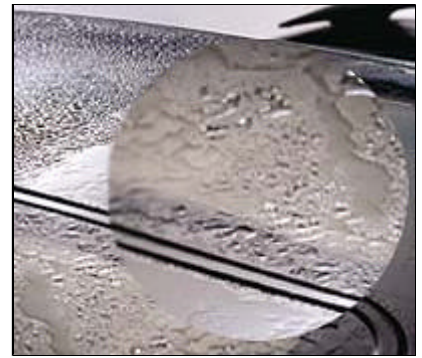
None of these polishes will be all things to all people. Even the highest-rated products fell down somewhat in one or two areas of performance, so choose according to your priorities. If water still beads on your car's finish, you may not need to wax at all. Simply wash the car regularly.

▶ For a moderately weathered finish, *3M One Step Cleaner Wax 39006* liquid is the clear choice for its cleaning ability--that is, if you don't mind waxing more often. Its durability was only fair. It costs about \$6.45 for a 16-ounce bottle. For a badly oxidized finish, you may need to start off with a polishing compound, available at auto-parts, discount, and department stores.

▶ If a shiny finish is your paramount concern, first consider *Zymöl Cleaner Wax* liquid and *Nu Finish Car Polish* paste. But be prepared to make some compromises. The cleaning ability of both products was so-so, and *Zymöl's* durability was just middling. Also, the *Nu Finish* tended to scratch or haze somewhat, a problem especially with dark-colored cars. The *Zymöl* is also quite expensive, at \$16 a pint. The *Nu Finish* costs about \$6.20 for a 14-ounce can.

▶ Among the high-rated polishes, the *Prestone Bullet Wax*, about \$7.25, and *Armor All Car Wax*, about \$5.55, lasted the longest. But neither one quite matched the gloss that the *Zymöl* and *Nu Finish* paste produced. The *Armor All* scratched or hazed more than most.

▶ A convenient applicator made *Prestone Bullet Wax* easier to apply than any of the other liquids and pastes we tested. Although spray polishes win hands down for ease of use, they aren't effective on cars with a very dirty or oxidized finish. And be prepared to do the job often; the durability of the sprays we tested was no better than fair. Of the three sprays, *Turtle Wax Express Shine Spray Car Wax* performed the best overall.



HALF 'N' HALF Before wetting down this weathered roof, we polished half with *Zymöl* and left half untreated. Note how the water forms beads on the polished part--the basis of our durability tests.

Photos by Robert Mescavage

Polishes for couch potatoes

With wash-and-wax products, you pour a couple of ounces of the liquid into a bucket of water and simply sponge off the car, as you would when washing it. That's supposed to leave behind some sort of waxy coating.

We bought and tested two such products--*Kit Carnauba Wash and Wax* (\$5.25 for 16 ounces) and *Turtle Wax Zip Wax Self-Drying Wash 'n Wax* (\$4.50 for 16 ounces).



If these wash-and-wax products deposited any wax at all on our test panels, it was too little for us to measure. We judged both of them poor in gloss improvement and also in cleaning ability. But boy, are they easy to apply.